

WHAT IS CLAIMED IS:

1. A back light module, comprising:

a frame;

a reflector disposed on a bottom of the frame;

at least a light source disposed over the reflector;

a diffusion panel disposed on the frame and also over the light source, wherein a thickness of the diffusion plate is between 4.1 mm and 15 mm; and

a plurality of optical films disposed on the diffusion plate.

2. The back light module of claim 1, further comprising at least a supporting component disposed in between the reflector and the diffusion plate.

3. The back light module of claim 1, wherein the light source comprises either at least a tube or at least a light emitting diode (LED) light source.

4. The back light module of claim 1, wherein the optical films comprise a plurality of brightness enhancement films or a plurality of prism films or a combination thereof.

5. A liquid crystal display (LCD), comprising:

a liquid crystal display panel; and

a back light module, comprising:

a frame;

a reflector disposed on the bottom of the frame;

at least a light source disposed over the reflector;

a diffusion panel disposed on the frame and also over the light source, wherein the thickness of the diffusion plate is between 4.1 mm and 15 mm; and

a plurality of optical films disposed on the diffusion plate.

6. The back light module of claim 5, further comprising at least a supporting component disposed in between the reflector and the diffusion plate.

7. The back light module of claim 5, wherein the light source comprises either at least a tube or at least a light emitting diode (LED) light source.

5 8. The back light module of claim 5, wherein the optical films comprise a plurality of brightness enhancement films and a plurality of prism films or a combination thereof.